

# **The mediating effects of multidimensional commitment on job satisfaction and intent to leave**

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**Summary** Structural equation modeling is used to estimate the mediating effects of affective, continuance, and normative commitment on the relationship between job satisfaction and intent to leave. Several competing configurational models are tested to determine whether the best fitting model is one whereby multidimensional commitment fully mediates, partially mediates, or does not mediate the relationship between job satisfaction and intent to leave. The results suggest that contrary to Meyer and Allen's (1991) fully mediated three-component model of organizational commitment, a partially mediated model fits the data best for this study. Copyright © 2000 John Wiley & Sons, Ltd.

## **Introduction**

Mathieu and Zajac (1990) state that organizational commitment has been most often used as an antecedent to predict withdrawal behaviors. Allen and Meyer (1996) contend that numerous studies have found affective, continuance, and normative types of commitment to be negatively correlated with turnover intentions among a variety of employees. Prior research utilizing structural equation modeling has also found that affective organizational commitment mediates the relationship between job satisfaction and intent to leave (Netemeyer, Burton and Johnston, 1995; Schaubroeck, Cotton and Jennings, 1989; Wunder, Dougherty and Welsh, 1982). Although considerable work has been done to establish the relationship between multidimensional commitment and turnover intent, as well as the mediating effects of affective commitment on job satisfaction and intent to leave, a small gap in the research remains. Past studies modeling the relationship between job satisfaction, organizational commitment, and intent to leave have primarily focused on affective commitment as the mediating variable. Since Meyer and Allen (1991) proposed their three-component model of commitment, over 40 studies have been published utilizing their multidimensional paradigm (Allen and Meyer, 1996). To date, however,

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no study has utilized structural equation modeling to analyze the mediating effects of all three components of commitment on job satisfaction and intent to leave.

The purpose of this study is to examine the mediating relationship of affective, continuance, and normative commitment on job satisfaction and intent to leave. To accomplish this, several competing configurational models will be examined. First, a fully mediated model is estimated whereby all three components of commitment are hypothesized to mediate the relationship between job satisfaction and intent to leave. Then, two nested competing models, a partially mediating model and a non-mediated model, will be estimated to determine which model fits the data best.

### *Meyer and Allen's (1991) three-component model of organizational commitment*

With over 40 published studies from 1990 to 1994 using some form of the Meyer and Allen (1991) scales (Allen and Meyer, 1996), Meyer and Allen's three-component model of commitment appears to be emerging as the predominant conceptualization of organizational commitment among current researchers. Furthermore, although over three-component scales exist to measure organizational commitment (e.g., Jaros *et al.*, 1993; O'Reilly and Chatman, 1986), Meyer and Allen (1991) are the only researchers to publish a theoretical model containing the antecedents and consequences of a three-component model of commitment. Consequently, Meyer and Allen's three-component model of commitment is used in the current study.

For Meyer and Allen (1991), the commitment construct includes elements of desire, need, and obligation which are represented in the three-components of affective, continuance, and normative organizational commitment. Affective commitment as an attitudinal process whereby people come to think about their relationship with the organization in terms of value and goal congruency. The degree to which an individual's goals and values align with the organization's is hypothesized to directly influence the individual's desire to remain in the organization. Overall, employees with a strong affective commitment remain with the organization because they *want* to do so.

Continuance organizational commitment is described as a need to remain in the organization based on the costs associated with leaving (Meyer and Allen, 1991). These costs are manifest in two distinct ways: (1) as individuals gain tenure in an organization they accrue investments in the form of pension plans, seniority, specialized and untransferable job skills, local affiliations, familial ties, and so on which may be sacrificed or damaged by changing jobs; and (2) individuals may feel as though they have to remain in their current jobs because they do not have any alternative job prospects. Thus, Meyer and Allen (1991) propose that because of side bets and a lack of job alternatives elsewhere, employees with a strong continuance commitment remain with the organization because they feel as though they *have* to do so.

Normative commitment refers to an employee's desire to stay with the organization based on a sense of duty, loyalty, or moral obligation (Meyer and Allen, 1991). This type of commitment may derive from an individual's culture or work ethic, causing them to feel obligated to stay with an organization. Normative commitment is distinguishable from affective and continuance commitment in that it does not reflect a need to associate with the organization's goals or missions, and that there is also no explicit extrinsic exchange involved in the relationship. Thus, the sense of loyalty and duty underlying an employee's normative commitment influences the individual to remain with the organization because they feel as though they *ought* to do so.

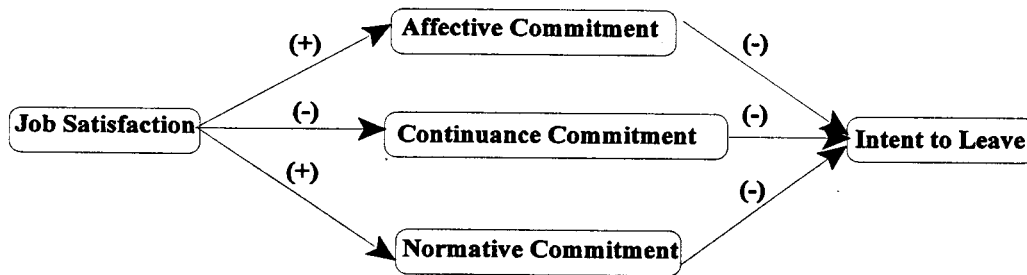


Figure 1. Model 1—fully mediated multidimensional commitment model

### *Three configurational models of multidimensional commitment, job satisfaction, and intent to leave*

When testing theory utilizing structural equation modeling, Anderson and Gerbing (1988) suggest comparing a main theoretical model of interest with the two most likely competing models nested within the main model. In this study, the main theoretical model of interest is presented in Model 1 as a fully mediated model whereby multidimensional commitment mediates the relationship between job satisfaction and intent to leave. Nested within the fully mediated model, Model 2 and Model 3 examine the partially mediated and non-mediated relationships of multidimensional commitment, respectively. Each model is described below.

#### **Model 1**

The structural model in Figure 1 proposes that job satisfaction affects affective, continuance, and normative commitment which in turn affect an employee's intent to leave the organization. This fully mediated model is selected as the main theoretical model of interest primarily due to Meyer and Allen's (1991) proposed theoretical model of multidimensional commitment which depicts the organizational commitment as a mediating variable between important job-related antecedents such as job satisfaction and organizational outcomes such as intent to leave.

Prior researchers have established significant relationships between the three components of commitment and job satisfaction. Mathieu and Zajac (1990) found that job satisfaction was related to both affective and continuance organizational commitment. Williams and Hazer (1986) used structural equation modeling to show that job satisfaction is antecedent to organizational commitment. Hackett, Bycio and Hausdorf (1994) found that job satisfaction had a positive influence on affective and normative commitment but had a negative effect on continuance commitment. Konovsky and Cropanzano (1991) and Withey (1988) also found that job satisfaction has a negative impact on continuance commitment.

Researchers have also established the relationship between multidimensional commitment and intent to leave. Mathieu and Zajac's (1990) meta-analysis reported that both affective and continuance commitment had a negative impact on intent to leave. Hackett *et al.* (1994), Cohen (1993), and Meyer, Allen and Smith (1994) have found that affective, continuance, and normative commitment have a negative impact on intent to leave in private sector organizations.

Although the preceding review supports distinct relationships between multidimensional commitment, job satisfaction, and intent to leave, no empirical study has estimated the mediating effect of all three components of commitment on job satisfaction and intent to leave

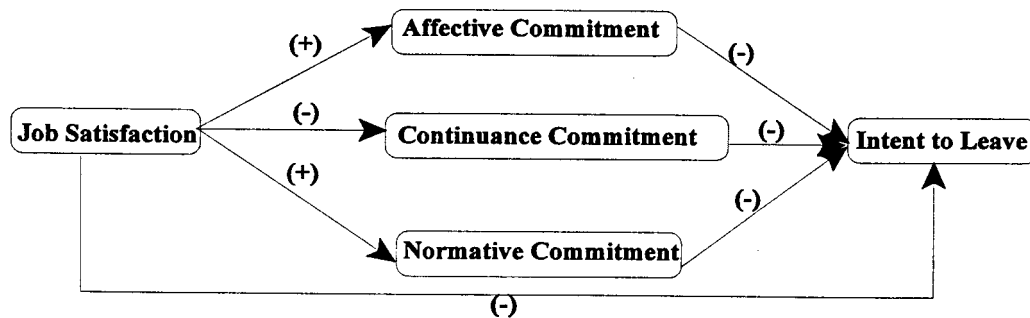


Figure 2. Model 2—partially mediated multidimensional commitment model

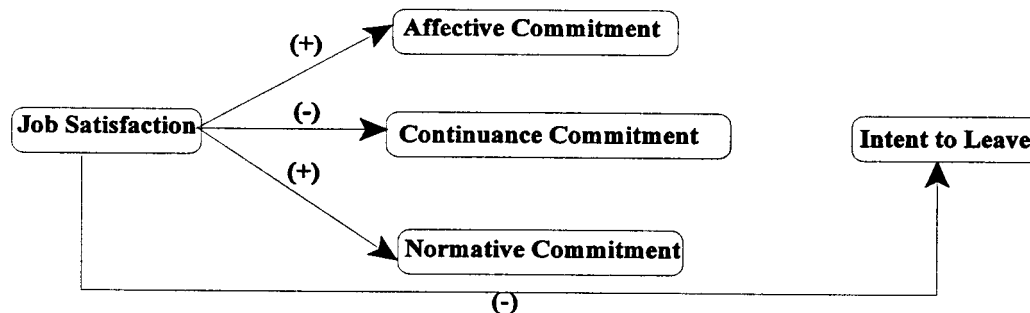


Figure 3. Model 3—non-mediated multidimensional commitment model

simultaneously. Consequently, Model 1 proposes to test the hypothesis that multidimensional commitment mediates the relationship between job satisfaction and intent to leave.

### Model 2

Model 2 is illustrated in Figure 2 and proposes a competing hypothesis which suggests that commitment only partially mediates the relationship between job satisfaction and intent to leave. This model is based on the empirical evidence which shows job satisfaction's direct impact on intent to leave. For example, Tate, Whately and Clugston (1997), Igarria and Guimaraes (1993), and Netemeyer, Burton and Johnston (1995) found job satisfaction to have a direct and negative impact on intent to leave. Schaubroeck *et al.* (1989) used structural equation modeling to determine that job satisfaction had a significant and negative effect on an employee's intent to leave among both civilian federal government manufacturing and university maintenance workers. Thus, Model 2 proposes to test the hypothesis that the best fitting model of multidimensional commitment is one where job satisfaction has both a direct and mediated effect on intent to leave.

### Model 3

Figure 3 depicts a non-mediated model whereby job satisfaction is hypothesized to directly impact multidimensional commitment and intent to leave, but the commitment variables are not hypothesized to impact intent to leave. Although no empirical evidence exists to support such a model, it is reasonable to posit the non-mediated model since both the mediated and partially mediated models are being estimated, and the non-mediated model is nested within the fully mediated model.

## Methods

### *Subjects and setting*

The organization selected for this study is a government agency in Western state, responsible for the administration of the state's tax revenue. Employees are primarily accountants, auditors, assessors, legislative and tax law experts, and management and support staff. Participation in the study was voluntary and participants' identities were anonymous. Four hundred and seventy surveys were distributed by the authors during working hours and 175 were returned directly to the authors one week later for a return rate of 37 per cent. Ninety-four per cent of the respondents were white, mean age was 41.7, mean educational level was 14.8 years, average tenure was 8.7 years, and 77 per cent were married. The state's racial demography is 96 per cent white. Thus, it appears that the racial demography of the sample was representative of the entire state. After coding the surveys, 156 were found acceptable, for a final acceptance rate of 33 per cent. Those surveys that were rejected were done so because of important missing data such as demographic information or entire sections of the survey which had been left incomplete.

### *Measures*

*Job satisfaction.* A 12-item scale developed by Quinn and Shepard (1974) was used in this study. The satisfaction scale consists of five measures of job satisfaction including satisfaction with pay, promotion, supervision, work, and co-workers. Earlier studies using this scale have shown adequate reliabilities of around 0.85 (e.g., Tate, Whatley and Clugston, 1997). The 12 items were summed to render an overall measure of job satisfaction. The reliability coefficient alpha for job satisfaction in this study is 0.81.

*Bases of commitment.* A 15-item version of Meyer and Allen's (1991) three-component organizational commitment instrument is used to measure affective, continuance, and normative commitment. The 5-point scales were anchored by 'strongly disagree' to 'strongly agree'. Allen and Meyer (1996) reported that the median reliabilities across 40 studies are 0.85, 0.79, and 0.73 for affective, continuance, and normative commitment respectively. Allen and Meyer's (1996) review of studies using their scales reports that both exploratory and confirmatory factor analyses validate the three-factor model and the factors are stable over time. The reliabilities found for this study among public employees are 0.85 for affective commitment, 0.88 for continuance commitment, and 0.80 for normative commitment.

*Intent to leave.* A three-item scale developed by Schaubroeck *et al.* (1989) is used to capture an employee's intent to leave. Schaubroeck *et al.* (1989) report a reliability coefficient of 0.70 for this scale, the intent to leave scale has a reliability of 0.89.

### *Analysis strategy*

LISREL 8 (Joreskog and Sorbom, 1993) was used to conduct the structural equation modeling for the hypothesized models. Single indicator latent variable analysis was used to estimate the relationships between the various constructs within each model. The technique for conducting

single indicator latent variable analysis is outlined by Kenny (1979) and Williams and Hazer (1986). They recommend reducing the number of indicator variables which load on their latent constructs to one. This is done by averaging items of each scale to create one indicator variable for each latent construct. The reliability alpha for the scale is used to determine the factor loading for each one-item indicator variable. The path from the latent variable to its indicator variable is set to the square root of the reliability of the measured variable. Error variance for each indicator variable is set to the product of the variance of the average of the items by scale and the quantity one minus the reliability of the scale. This technique has been used by several researchers involved with organizational commitment research (e.g., Moorman, Neihoff and Organ, 1993; Settoon, Bennett and Liden, 1996).

The fit indices produced by LISREL will be examined to determine which of the hypothesized models fits the data best. Joreskog and Sorbom (1993) suggest analyzing the chi-squared statistic, root mean square error of approximation (RMSEA), the goodness and adjusted goodness-of-fit indices (GFI and AGFI), and the normed-fit index (NFI). Brown and Cudeck (1989) suggest that RMSEA values at or below 0.08 indicate a good fit between the model estimated by the sample data and the population. For the other fit indices described above, values ranging from the high 0.80s to 0.90s indicate a good fit (Mulaik *et al.*, 1989).

## Results

Bivariate correlations, means, and standard deviations are reported in Table 1. Table 2 presents the fit indices for the structural equation models examined in this study. Model 2 has a chi-square/*df.* ratio within the recommended 5:1 (Medsker, Williams and Halohan, 1994), an RMSEA of 0.06, and other fit indices within the high 0.80s to 0.90s. Consequently, Model 2 (the partially mediated model) appears to provide the best fits for the data. An examination of the

Table 1. Correlations and descriptive statistics

	1	2	3	4	5
1. Affective commitment	—				
2. Continuance commitment	−0.04	—			
3. Normative commitment	0.44*	0.05	—		
4. Job satisfaction	0.57*	−0.12	0.26*	—	
5. Intent to leave	−0.50*	0.02	−0.28*	−0.53*	—
Mean	14.4	11.8	8.9	46.0	7.9
S.D.	4.2	4.0	3.0	7.6	4.0

*N* = 156, one-tailed; \**p* < 0.001

Table 2. Fit indices for structural equation models

Hypothesized model	$\chi^2$	<i>df.</i>	RMSEA	GFI	AGFI	NFI
Model 1 (fully mediated)	34.4	4	0.22	0.92	0.70	0.88
Model 2 (partially mediated)	14.8	3	0.06	0.96	0.88	0.95
Model 3 (non-mediated)	28.7	6	0.16	0.93	0.82	0.90

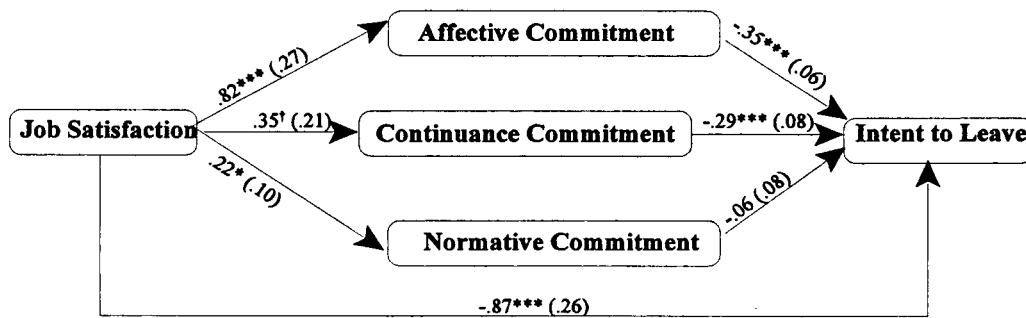


Figure 4. Path coefficients for the partially mediated multidimensional commitment model (Note: S.E. in parenthesis. † $p < 0.10$ ; \* $p < 0.05$ ; \*\*\* $p < 0.001$ )

modification indices for the fully mediated model (Model 1) suggested that the fit of the model could be improved by adding a path from job satisfaction to intent to leave. Adding a path from job satisfaction to intent to leave in essence creates Model 2, the partially mediated model. Thus, the modification index for the fully mediated model suggested that the partially mediated model nested within the fully mediated model would provide a better fit for the data. As the results shown in Table 2 indicate, the partially mediated model (Model 2) provides the best fit for the data. Since Model 1 and Model 3 are nested within Model 2, a change in chi-square statistic was performed between Model 1 and Model 2, and Model 3 and Model 2. The chi-square difference between Model 1 and Model 2 was 19.6 with 1 degree of freedom ( $p < 0.001$ ), and the chi-square difference between Model 3 and Model 2 was 13.9 with 3 degrees of freedom ( $p < 0.001$ ). Overall, Model 2, the partially mediated multidimensional model of commitment, appears to provide a superior fit for the data as compared with Model 1 and Model 3.

Figure 4 presents the standardized path coefficients for the partially mediated Model 2. As hypothesized, job satisfaction has a positive impact on affective and normative commitment. Contrary to our hypothesis, job satisfaction also has a positive impact on continuance commitment ( $p < 0.08$ ). Job satisfaction was initially proposed to have a negative impact on continuance commitment because job satisfaction was viewed as an affective response to work, and affective and continuance commitment are inversely related. However, job satisfaction's positive effect on continuance commitment may be due to the composite nature of the scale which contains items tapping an individual's satisfaction with their pay. Since some of continuance commitment scale items ask the respondent if it would be too costly to leave their current organization or if they believe another organization could not match their overall benefits, a measure of job satisfaction which contains satisfaction with pay may likely have a positive impact on continuance commitment. Figure 4 also shows that normative commitment does not have a significant impact on intent to leave, however, job satisfaction has a greater direct impact on intent to leave than organizational commitment.

## Discussion

Meyer and Allen's (1991) three component model of commitment appears to be gaining support as the predominant conceptualization of multidimensional commitment utilized this decade (Allen and Meyer, 1996). Their original model posits the multidimensional commitment fully

mediates the relationship between work related antecedents such as job satisfaction and important organizational outcomes such as intent to leave. As noted earlier, however, researchers have found that structural models containing affective commitment alone tend to only partially mediate the relationship between job satisfaction and intent to leave. The purpose of this study was to further our understanding of organizational commitment by examining structural models of job satisfaction and intent to leave which were mediated simultaneously by affective, continuance, and normative commitment. The results of this study suggest that a partially mediated model of multidimensional commitment fits the data better than a fully mediated or non-mediated model.

The implications of this research could provide interest for both practitioners and researchers. Since the three types of commitment are not mutually exclusive, each employee can simultaneously experience all three types of commitment (Meyer and Allen, 1991). If the results of this study hold across other samples, managers could be encouraged to know that an employee's state of satisfaction at work may simultaneously heighten affective, continuance, and normative commitments, and these in turn can affect important organizational outcomes. Researchers should be encouraged at the possibility of exploring the more finely grained distinctions in employee attitudes and organizational outcomes that appears to be emerging in recent research centering around multidimensional commitment (e.g., Becker *et al.*, 1996; Clugston, Howell and Dorfman, in press).

### *Study limitations and future research*

As with most survey research, a common method bias may be present since all the data were self-reported. Since the constructs of this study asked for employee attitudes and their intent to leave, self-report data are appropriate for this study. Also, due to the cross-sectional nature of the data collection in this study, drawing causal inferences among the constructs examined may not be appropriate. Another limitation of this study relates to external validity. Because a government agency was utilized in this study, generalizing these results to other types of public and private organizations would be inappropriate.

Future research should attempt to replicate the findings of this study in order to make generalizations to a broader scope of the public sector domain. Also, future research should continue to utilize structural equation modeling to examine multidimensional models of commitment and other important organizational outcomes such as performance, absenteeism, and organizational citizenship behaviors. Finally, Mathieu's (1991) research may raise an interesting question about the causality between job satisfaction and organizational commitment. Although there is considerable evidence which suggests that job satisfaction is antecedent to affective commitment, Mathieu (1991) contends that the real relationship between affective commitment and job satisfaction may be non-recursive. If this assertion warrants merit, then future research ought to further examine the causal nature between job satisfaction and all three types of commitment.

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